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High School Earth Science, third standard

Supporting Content Web Sites

USGS - Geology, http://geology.usgs.gov/

Information on minerals, volcanoes, earthquakes, and earth surface dynamics.

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Earth Science from Moorland School,

http://www.moorlandschool.co.uk/earth/rockcycle.htm

Information on the rock cycle including types of rocks, weathering, erosion, deposition, transportation, earth structure, plate tectonics, fossil fuels, etc.

High School Earth Science, third standard

College of Alameda – Physical Geography, http://members.aol.com/rhaberlin/pg4.htm Information on the learning modules for a college course. Includes notes and graphics on geological processes.

High School Earth Science, third standard

USGS – The Interior of the Earth, http://pub.usgs.gov/gip/interior

Discusses the different layers of the earth.

High School Earth Science, third standard

USGS – Plate Tectonics and Sea-Floor Spreading,

http://vulcan.wr.usgs.gov/Glossary/PlateTectonics/description_plate_tectonics.html

Information on the Ring of Fire, plate tectonics, and volcanoes.

High School Earth Science, third standard

USGS – Rocks and Images,

http://interactive2.usgs.gov/learningweb/explorer/topic rocks.htm

Information on how rocks can give clues to the history and story of earth. Also discusses types of rocks.

High School Earth Science, third standard

USGS – Geology in the Parks, http://wrgis.wr.usgs.gov/docs/parks/rxmin/index.html Information on minerals, igneous, sedimentary, and metamorphic rocks with visual glossary, and naming and classification charts.

High School Earth Science, third standard

USGS – Educational Resources for Secondary Grades

http://education.usgs.gov/common/secondary.htm

Links on the USGS site to teaching modules, structured classroom activities for middle and secondary schools.

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Geology and Paleontology Resources, http://www.freeinquiry.com/skeptic/badgeology/resources.htm Various links to geological resources and education resources. High School Earth Science, third standard Maja G. Fickett Page 3

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Suggested Literature

Vernon, R. H. and Holden, R. (2000). *Beneath Our Feet: The Rocks of Planet Earth.* Cambridge University Press.

ISBN: 0-521-79030-1

Lexile Level:

Through explanation of earths mantle movement, folded rock formations, mechanics and consequences of earthquates, volcanoes, and explanations of mineral formations.

High School Earth Science, third standard

Cattermole, Peter John. (2000). Building Planet Earth. Cambridge University Press.

ISBN: 0-521-58278-4

Lexile Level:

Discusses evolution of Earth (physical and chemical), plate tectonics, geological cycles, etc.

High School Earth Science, third standard

Murphy, Carolyn Hanna. (1995). *Carolina Rocks! The Geology of South Carolina*. Sandlapper Publishing Company.

ISBN: 0-87844-121-2

Lexile Level:

Discusses geology of South Carolina, regions of state, and South Carolina fossils.

High School Earth Science, third standard

Gold, Thomas. (2001). The Deep Hot Biosphere: The Myth of Fossil Fuels.

Copernicus.

ISBN: 0-387-95253-5

Lexile Level:

Theories about earth's core and origins of fossil fuels.

High School Earth Science, third standard

Sorrell, Charles A. (1973). A Field Guide and Introduction to the Geology and Chemistry of Rocks and Minerals. St. Martin's Press.

ISBN: 1-58238-124-0

Lexile Level:

Pocket guide to rocks, minerals, gems.

High School Earth Science, third standard

Coenraads, Robert R. (2005). Rocks & Fossils: A Visual Guide. Firefly Books.

ISBN: 1-55407-068-6

Lexile Level:

Information on rocks, fossils and how they can show clues to earth's past. Also describes the interior processes of the earth.

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Smith, Gary, and Pun, Aurora. (2005). *How Does Earth Work: Physical Geology and the Process of Science*. Prentice Hall.

ISBN: 0130341290

Lexile Level:

Discusses geology at non-science major level with many pictures and diagrams.

High School Earth Science, third standard

Smith, P. Sean, and Ford, Brent A. (1994). *Project Earth Science: Physical Oceanography*. NSTA Press.

ISBN: 0-87355-130-3

Lexile Level:

Activities on waves, characteristics of the oceans, and its geology.

High School Earth Science, third standard

Ford, Brent A. (1996). Project Earth Science: Geology. NSTA Press.

ISBN: 978-0-87355-131-1

Lexile Level:

Information on Earth's physical evolution and processes.

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Suggested ETV Streamline SC or ITV Video Resources

Forces That Shape the Earth

Entire Video

ETV Streamline SC

Describes lithosphere, asthenosphere, plate tectonics, rock cycle, types of rocks, weathering, human forces, etc.

0-20:00

High School Earth Science, third standard

Historical Geology: A Glimpse of the Earth's Past

Entire Video

ETV Streamline SC

Shows step by step through different earth history periods of the dynamic processes of Earth.

0-30:00

High School Earth Science, third standard

When the Earth Quakes

Entire Video

ETV Streamline SC

Shows multiple earthquake disasters. Discusses current situation on East Coast of US.

0-28:00

High School Earth Science, third standard

Into the Volcano

Entire Video

ETV Streamline SC

Explorers travel into a volcano and observe/discuss its dynamic processes.

0-30:00

High School Earth Science, third standard

The Global Ocean Realm

Entire Video

ETV Streamline SC

Introduces an overview of ocean formation and its geological history.

0-20:00

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Career Connections

Economic Geologist

These geologists specialize in the study of economically valuable earth materials such as ore deposits. They would help companies such as mining companies determine if a certain place would contain enough ore.

Geophysist

They study how the earth is effected by gravity, magnetism, and seismic events and characteristics. (ES-3)

Remote Sensing Geologist

They use radar, sonar, seismology, and aerial photography to locate and analyze internal and external formations of the Earth. (ES-3)

Petrologist

They analyze and classify rocks to learn of their origin and history. (ES-3)